# U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) 2015 Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces Application 40 CFR PART 60 SUBPARTS AAA AND QQQQ

Disclaimer: The statutory provisions and the EPA regulations described in this document contain legally binding requirements. This document is not a substitute for those provisions or regulations, nor is it a regulation itself. In the event of a discrepancy, please refer to 40 CFR PART 60 Subparts AAA AND QQQQ, Sections 60.533(b), 60.5475(b), and Appendix A–8. This document may be revised periodically without public notice. If you have additional questions, please contact Rafael Sanchez at 202-564-7028 or via email at sanchez.rafael@epa.gov.

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		GENERAL I	INFORMATION				
Manufacturer's N	ame: Hearth & Home	Technologies					
Heater Type	Adjustable Burn Rate	Pellet	Cinalo Purn		Forced Air		
(Circle One):	Wood Heater	Stove	Single Burn Rate Heater	Hydronic Heater	Furnace	Other:	
Hydronic Heater Type (Circle One):	Traditional	Full Storage	Partial Storage	Indoor/Outdoor	Other:		
Forced-Air Furnace Type (Circle One):	Small (less than 65,000 output)	BTU/hr heat	Large (greater than heat output)	65,000 BTU/hr Other:			
Fuel Tested:	Crib	Pellet	Cordwood	Wood Chips	Other	:	
Test Method(s) A	STM E2515 and ASTM	E2779	Catalyst: No				
Model Name and Design Number (The model name and design number must clearly distinguish one model from another. The name and design number cannot include the EPA symbol or logo or name or derivatives such as "EPA): 31M-ACC-C / Discovery-II-C  Physical Address (Street number and Address, not P.O. Box): 352 Mountain House Road  Mailing Address: 352 Mountain House Road, Halifax, PA 17032							
City: Halifax		State: PA		ZIP Code: 17032			
Phone: 717-362-5153		Email: podschelnec@hearthnhome.co m		Website: Quadrafire.com			
EPA Submission I	Date of 30 day Notice:	01/12/2017					
	MANUFACTURE	R'S AUTHORIZE	D REPRESENTATI	VE INFORMATIO	ın		
Name: Corie Pod	schelne						
Position/Title: En	ngineering Manager						
Address: 352 Mo	untain House Road						
City: Halifax		State: PA		ZIP Code: 17032			
Phone: 610-506-	Phone: 610-506-7338 E-mail: podschelnec@hea		earthnhome.com	Website: Quadrafire.com			
Remarks:							
			TECT LABORATO				

**EPA-APPROVED TEST LABORATORY**[ PAGE \\* MERGEFORMAT ]

# APPLICATION FOR A CERTIFICATE OF COMPLIANCE PURSUANT TO 40 CFR PART 60 SUBPARTS AAA AND QQQ

2015 STANDARDS OF PERFORMANCE FOR NEW RESIDENTIAL WOOD HEATERS, NEW RESIDENTIAL HYDRONIC HEATERS AND FORCED-AIR FURNACES

Name of Test Laboratory: Omni-T	est Laboratories, Inc	
Name of Person Authorized or Res	ponsible for Conducting Compliance To	est: Bruce Davis
Position/Title: Testing Manager		
Address: 13327 NE Airport Way		
City: Portland	State: OR	ZIP Code: 97230
Phone: 503-643-3788	Email:bdavis@omni-test.com	Website: omni-test.com
Remarks:		
	EPA-Approved Third Party Certifi	er
Name of Certifier Entity: Omni-Tes	t Laboratories, Inc	
Name of Person Authorized or Res Alex Tiegs	ponsible for Reviewing Test Report an	d/or Issuing Certification of Conformity:
Position/Title: President		
Address: 13327 NE Airport Way		
City: Portland	State: OR	ZIP Code: 97230
Phone: 503-643-3788	Email: atiegs@omni-test.com	Website: omni-test.com
Remarks:		

### COMPLIANCE STATEMENTS AND ACKNOWLEDGEMENTS - SECTIONS 60.533(B) AND 60.5475(B)

#### INSTRUCTIONS: PLEASE READ THE BELOW STATEMENTS AND AFFIRMATIONS AND ADDRESS ACCORDINGLY.

#### FOR EMISSIONS DATA SUMMARY TABLES SEE ATTACHMENTS

# 1. Engineering Drawings Statement

Engineering drawings and specifications of components that may affect emissions (including specifications for each component listed in paragraphs (k)(2), (3) and (4) of 60.533(b) and 60.5475(b). Manufacturers may use assembly or design drawings that have been prepared for other purposes, but must designate on the drawings the dimensions of each component listed in paragraph (k) of this section. Manufacturers must identify tolerances of components listed in paragraph (k)(2) of 60.533(b) and 60.5475(b) that are different from those specified in that paragraph, and show that such tolerances cannot reasonably be anticipated to cause wood heaters in the model line to exceed the applicable emission limits. The drawings must identify how the emission-critical parts, such as air tubes and catalyst, can be readily inspected and replaced.

See Certification Test report number Confidential Business Information 0061WS066E <u>Section 2 Pages 13 to 103</u>
All components listed within certification test report number Confidential Business Information <u>Section 2 Pages 13</u> to 103, comply with tolerances specified in 60.533(k) (2).

# 2. Firebox Statement Requirement

A statement whether the firebox or any firebox component (including the materials listed in paragraph (k)(3) of 60.533(b) and 60.5475(b) will be composed of material different from the material used for the firebox or firebox component in the wood heater on which certification testing was performed, a description of any such differences and demonstration that any such differences may not reasonably be anticipated to adversely affect emissions or efficiency.

All wood heaters under model name 31M-ACC-C / Discovery-II-C will be composed of the same firebox and any firebox component materials as the wood heater model name 31M-ACC-C / Discovery-II-C which certification testing was performed.

# 3. CBI

Clear identification of any claimed confidential business information (CBI). Submit such information under separate cover to the EPA CBI Office; Attn: Residential Wood Heater Compliance Program Lead, 1200 Pennsylvania Ave., NW, Room 7138, MS:2227A, Washington, DC 20460. **Note that all emissions data, including all information necessary to determine emission rates in the format of the standard, cannot be claimed as CBI.** 

All information within certification test report number Confidential Business Information <u>0061WS066E - Section 2 Pages</u> <u>13 to 103</u> is considered to be confidential business information. This information has been submitted under a separate cover to the EPA CBI Office; Attn: Residential Wood Heater Compliance Program Lead.

# 4. Valid Certification Statement

All documentation pertaining to a valid certification test, including the complete test report and, for all test runs: Raw data sheets, laboratory technician notes, calculations and test results. Documentation must include the items specified in the applicable test methods. Documentation must include discussion of each test run and its appropriateness and validity, and must include detailed discussion of all anomalies, whether all burn rate categories were achieved, any data not used in the calculations and, for any test runs not completed, the data collected during the test run and the reason(s) that the test run was not completed and why. The burn rate for the low burn rate category must be no greater than the rate that an operator can achieve in home use and no greater than is advertised by the manufacturer or retailer. The test report must include a summary table that clearly presents the individual and overall emission rates, efficiencies and heat outputs. Submit the test report and all associated required information, according to the procedures for electronic reporting specified in  $\S$  60.537(f) and 60.5475(f).

All documentation pertaining to the valid certification tests are included within certification test report number 0061WS066E under section 5 (Test Data), section 3 (Quality Assurance/Quality Control).

# 5. Warranties

A copy of the warranties for the model line, which must include a statement that the warranties are void if the unit is used to burn materials for which the unit is not certified by the EPA and void if not operated according to the owner's manual.

Copy of the warranty is included within certification test report number <u>0061WS066E - Section 5 (Owner's Manual Pages 227 thru 340)</u>.

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### 6. Q/A Statement

A statement that the manufacturer will conduct a quality assurance program for the model line that satisfies the requirements of paragraph (m) of this section.

Hearth & Home Technologies is conducting a quality assurance program for the wood heater model 31M-ACC-C / Discovery-II-C that satisfies the requirements of 60.533 (m).

# 7. Laboratory Sealing of Unit

A statement describing how the tested unit was sealed by the laboratory after the completion of certification testing and asserting that such unit will be stored by the manufacturer in the sealed state until 5 years after the certification test.

OMNI-Test Laboratories, Inc. has sealed the tested wood heater model 31M-ACC-C / Discovery-II-C in compliance with EPA regulations (40 CFR, Part 60, Subpart AAA). "DO NOT TAMPER" labels were placed on the door and all other openings. The unit was sealed within plastic wrapping material. "DO NOT TAMPER" labels and packing tape were wrapped around the unit. "DO NOT TAMPER" labels have been placed on all outer surfaces of the container. The tested wood heater model 31M-ACC-C / Discovery-II-C is sealed and being held in the custody of Corie Podschelne and is stored at Hearth & Home Technologies – 352 Mountain House Road, Halifax PA, 17032.

#### 8. Statements that the wood heaters manufactured under this certificate will be-

- (i) Similar in all material respects that would affect emissions as defined in § 60.531 to the wood heater submitted for certification testing, and labeled as prescribed in § 60.536 and 60.5478.
- (ii) Accompanied by an owner's manual that meets the requirements in § 60.536 and 60.5478. In addition, a copy of the owner's manual must be submitted to the Administrator and be available to the public on the manufacturer's web site.

Wood Heaters manufactured under model name 31M-ACC-C / Discovery-II-C certificate will be:

- Similar in all material respects that would affect emissions as defined in § 60.531 to the wood heater submitted for certification testing.
- Labeled as prescribed in § 60.536.
- Accompanied by an owner's manual that meets the requirements in § 60.536. In addition, a copy of the
  owner's manual has been submitted within certification test report number 0061WS066E Section 5
  (Owner's Manual Pages 227 thru 340), and is available to the public on our website.

# 9. Third Party Certification Statement

A statement that the manufacturer has entered into contracts with an approved laboratory and an approved third-party certifier that satisfy the requirements of paragraph (f) of this section.

Hearth & Home Technologies has contracted <u>OMNI-Test Laboratories</u>, <u>Inc.</u> to conduct regular (at least annual) unannounced audits of the manufacturing facility, appliance and quality assurance plan.

# 10. Approved laboratory/third party Statement

A statement that the approved laboratory and approved third-party certifier are allowed to submit information on behalf of the manufacturer, including any claimed to be CBI.

Hearth & Home Technologies approves <u>OMNI-Test Laboratories</u>, <u>Inc.</u> as the testing laboratory and third-party certifier to submit information on behalf of Hearth & Home Technologies including any claimed to be Confidential Business Information (CBI).

### 11. Manufacturer's Website Certification Test Reports Availability Statement

A statement that the manufacturer will place a copy of the certification test report and summary on the manufacturer's web site available to the public within 30 days after the Administrator issues a certificate of compliance.

Hearth & Home Technologies will place a copy of the model name 31.M-ACC-C / Discovery-H-C certification test report and summary on Quadrafire website available to the public within 30 days of receiving a certificate of compliance.

# 12. Transferability Acknowledgement Statement

A statement of acknowledgment that the certificate of compliance cannot be transferred to another manufacturer or model line without written approval by the Administrator.

Hearth & Home Technologies acknowledges that the model name 3 IM-ACC-C / Discovery-II-C certificate of compliance cannot be transferred to another manufacturer or model line without written approval by the Administrator.

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# 13. Statement about Selling Wood Heaters without an EPA Certificate

A statement acknowledging that it is unlawful to sell, distribute or offer to sell or distribute an affected wood heater without a valid certificate of compliance.

Hearth & Home Technologies acknowledges that is it unlawful to sell, distribute or offer to sell or distribute an affected wood heater without a valid certificate of compliance.

**Print Name and Title: Corie Podschelne** 

Date: 11/2/2021

Signature of responsible representative of the manufacturer certifying the accuracy of the above statements:

The authorized or responsible party whose signature is above is certifying that the manufacturer has complied with and will continue to comply with all requirements of the 2020 NSPS for compliance certification and that the manufacturer remains responsible for compliance regardless of any error by the test laboratory or third-party certifier.

<sup>\*\*</sup>Responsible Party listed in Section 13 above has changed from original application due to changes in positions and responsibilities at Hearth and Home Technologies. Section 1-12 remain identical to the original application.\*\*

Table 1 - Particulate Emissions

Run	<b>Burn Rate</b> (kg/hr dry)	ASTM E2515 Emissions (g/hr)
1	0.99	1.93
2	1.39	1.09
3	1.14	0.97
4*	1.04	1.27
5	2.26	3.92
Weighted particulate emiss	ion average of 4 test runs: 1.9 gran	ms per hour.

<sup>\*</sup>Fan confirmation run excluded from weighted average results

**Table 2 - Particulate Emissions (First Hour)** 

Run	ASTM E2515 Emissions – First Hour (g/hr)
1	5.85*
2	3.11
<b>(%)</b>	2.31
4	4.04
5	5.27

<sup>\*</sup>Run 1 filter change occurred at 80 minutes. Corrected Emissions at 80 minutes is 4.36 g/hr.